Signature Page

Signed By

ASISH ADHIKARY

Organization

CONTINENTAL CARBON CO

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Agreement #2

I am a duly authorized representative of the business or entity submitting an electronic record or data to DEQ, and I have the authority to submit said records and/or data on behalf of the facility I am representing.

Agreement #3

I agree that use of this System combined with the user’s login and password to sign the submission document constitutes an electronic signature equivalent to my written signature. I have reviewed the electronic report being submitted in its entirety and agree to the validity, accuracy, and completeness of the information contained within it to the best of my knowledge. I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Agreement #4

I am free to discontinue this transaction by selecting “Cancel”; otherwise, the records will be submitted to the DEQ, and the transaction will be complete.

Confirmation Number

S20220401082626-F333-R2021

SLEIS signed on: 4/1/2022 8:26:57 AM. See document signature for details.

2021 Emissions Inventory Report

CONTINENTAL CARBON CO (125)

Emissions Summary for CARBON BLACK PRODUCTION FACILITY (333)

CRITERIA AIR POLLUTANT (CAP) EMISSIONS TOTALS

Pollutant Code/CAS #	Pollutant Name	Total Emissions (tons)*
CO	Carbon Monoxide	91.805
NOX	Nitrogen Oxides (NOx) expressed as NO2	1,037.429
PM10-PRI	PM10 - Primary (Filterable + Condensible)	178.648
PM25-PRI	PM2.5 - Primary (Filterable + Condensible)	178.648
SO2	Sulfur Oxides (SOx) expressed as SO2	2,248.464
VOC	Volatile Organic Compounds (VOCs)	13.309

HAZARDOUS AIR POLLUTANT (HAP) and/or OTHER POLLUTANT EMISSIONS TOTALS

Pollutant Code/CAS #	Pollutant Name	Is VOC/PM?	Total Emissions (tons)*

*Rounded to 3 digits past the decimal point. Note that where rounding results in 0, <.001 is indicated.

2021 Emissions Inventory Report

CONTINENTAL CARBON CO (125)

CARBON BLACK PRODUCTION FACILITY (333)

COMPANY

Mailing Address:	1006 E OAKLAND AVE PONCA CITY, OK 74601
Contact Phone:	(580) 736-8111
Contact FAX:	(580) 763-8150

FACILITY

Facility Identifier:	333	**Facility Name:**	CARBON BLACK PRODUCTION FACILITY
Status:	OP - Operating	**Status Year:**	
NAICS:	325180 (Primary) - Other Basic Inorganic Chemical Manufacturing		
Comments:			

FACILITY - ADDRESS

Location Address:	1006 E OAKLAND AVE PONCA CITY, OK 74601

FACILITY - LOCATION

Latitude (decimal degress):	36.66616	**Longitude (decimal degress):**	-97.07163
Collection Method:	014 - GPS code measurements (pseudo range) differential (DGPS)	**Data Collection Date:**	08/12/2008
Geographic Reference Point:	101 - Entrance Point of a Facility, System, or Station	**Geodetic Reference System:**	003 - World Geodetic System of 1984

FACILITY - ADDITIONAL INFORMATION

Field Name	Field Value
Oil & Gas Facility Category	Not Applicable
Permit Number(s)	92-092-C PSD M-1,2017-0914-TVR2,2004-302-C M-4,2004-302-C M-2
API/US Well Number	
SIC Number	2895
TRI Identifier (ID)	74602WTCCR1MILE

RELEASE POINTS					
ID	**Type**	**Description**	**Status**	**Details**	**Location**
18213	Vertical	Boiler NO 1 stack	OP in 2007	Height: 18.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 800.0 F, Flow Rate: 4,610.0 ACFM, Velocity: 97.827 FPS	Uses Facility Site Location
18214	Vertical	Boiler NO 2 Stack	OP in 2002	Height: 18.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 800.0 F, Flow Rate: 4,610.0 ACFM, Velocity: 97.827 FPS	Uses Facility Site Location
18215	Vertical with Rain Cap	CLEAN UP BAG FILTER NO 1	OP in 2002	Height: 38.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
18216	Vertical	CLEAN-UP BAG FILTER NO 2	OP in 2007	Height: 38.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
18217	Goose Neck	CLEAN-UP BAG FILTER NO 3	OP in 2002	Height: 21.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
18218	Vertical with Rain Cap	CLEAN-UP BAG FILTER NO 4	OP in 2002	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
18219	Goose Neck	Shipping Dept CUBF NO 1	OP in 2002	Height: 30.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 72.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
18220	Vertical	Thermal OxidizerNO 1 - TOx for Production Units 1 and 2	OP in 2002	Height: 150.0 FEET, Shape: Circular, Diameter: 10.5 FEET, Temperature: 1,700.0 F, Flow Rate: 606,000.0 ACFM, Velocity: 116.6 FPS	Uses Facility Site Location
18221	Vertical	TO NO 2 - The TOx for Production Unit NO 3	OP in 2002	Height: 150.0 FEET, Shape: Circular, Diameter: 9.5 FEET, Temperature: 1,700.0 F, Flow Rate: 381,000.0 ACFM, Velocity: 89.6 FPS	Uses Facility Site Location
18222	Vertical	TO NO 4 - Production Unit NO 3	OP in 2002	Height: 213.0 FEET, Shape: Circular, Diameter: 7.0 FEET, Temperature: 1,700.0 F, Flow Rate: 369,200.0 ACFM, Velocity: 159.9 FPS	Uses Facility Site Location
18223	Fugitive Area	CB Storage Tank	OP in 2002	Fugitive Height: 120.0 FEET, Fugitive Width: 10.0 FEET, Fugitive Length: 10.0 FEET, Fugitive Angle: 0°	Uses Facility Site Location
18224	Fugitive Area	Feedstock Storage Tank vent	OP in 2002	Fugitive Height: 33.0 FEET, Fugitive Width: 10.0 FEET, Fugitive Length: 10.0 FEET, Fugitive Angle: 0°	Uses Facility Site Location
33538	Fugitive Area	Shipping Dept. CUBF NO 2	OP in 2005	Fugitive Height: 30.0 FEET, Fugitive Width: 6.0 FEET, Fugitive Length: 6.0 FEET, Fugitive Angle: 0°	Uses Facility Site Location
41618	Horizontal	Sealed Bin Clean Up Bag Filter	OP in 2008	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
47207	Vertical	Thermal Oxidizer NO 1	OP in 2010	Height: 150.0 FEET, Shape: Circular, Diameter: 11.5 FEET, Temperature: 1,700.0 F, Flow Rate: 606,000.0 ACFM, Velocity: 97.24 FPS	Uses Facility Site Location
47234	Vertical	Thermal Oxidizer NO 1	OP in 2010	Height: 150.0 FEET, Shape: Circular, Diameter: 11.5 FEET, Temperature: 1,700.0 F, Flow Rate: 606,000.0 ACFM, Velocity: 97.24 FPS	Uses Facility Site Location
47238	Vertical	Thermal Oxidizer NO 2	OP in 2010	Height: 150.0 FEET, Shape: Circular, Diameter: 9.5 FEET, Temperature: 1,700.0 F, Flow Rate: 381,000.0 ACFM, Velocity: 89.59 FPS	Uses Facility Site Location
47239	Vertical	Thermal Oxidizer NO 3	OP in 2007	Height: 213.0 FEET, Shape: Circular, Diameter: 7.0 FEET, Temperature: 1,700.0 F, Flow Rate: 369,200.0 ACFM, Velocity: 159.9 FPS	Uses Facility Site Location
104185	Vertical with Rain Cap	EPN 3	OP in 2007	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104186	Vertical	EPN 7	OP in 2007	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104187	Vertical	EPN 11	OP in 2007	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location

ID	Type	Description	Status	Details	Location
104188	Vertical	EPN 20	OP in 2011	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104189	Vertical	EBF 4	OP in 2007	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104190	Vertical	Sealed Bin Clean-Up Bagfiller NO 2	OP in 2007	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104191	Vertical	Transloading Clean-Up Bagfilter	OP in 2011	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104197	Vertical	Dryer 11 Firebox stack	OP in 2011	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104198	Vertical with Rain Cap	Dryer 12 Firebox	OP in 2011	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104199	Vertical	Dryer 21 Firebox	OP in 2011	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104200	Vertical	Dryer 31 Firebox	OP in 2011	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104201	Vertical	Dryer 32 Firebox	OP in 2011	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104202	Vertical	Dryer 41 Firebox	OP in 2007	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104203	Vertical	Reactor 11	OP in 2011	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104204	Vertical	Reactor 12	OP in 2011	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104205	Vertical	Reactor 21	OP in 2007	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104206	Vertical	Reactor 31	OP in 2011	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104207	Vertical	Reactor 32	OP in 2011	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104208	Vertical	Reactor 41	OP in 2007	Height: 35.0 FEET, Shape: Circular, Diameter: 1.0 FEET, Temperature: 70.0 F, Flow Rate: 5,000.0 ACFM, Velocity: 106.1 FPS	Uses Facility Site Location
104209	Vertical	Waste Gas Combuster 11	OP in 2011	Height: 150.0 FEET, Shape: Circular, Diameter: 10.5 FEET, Temperature: 1,700.0 F, Flow Rate: 606,000.0 ACFM, Velocity: 116.6 FPS	Uses Facility Site Location
104210	Vertical	Waste Gas Combustor 12	OP in 2011	Height: 150.0 FEET, Shape: Circular, Diameter: 10.5 FEET, Temperature: 1,700.0 F, Flow Rate: 606,000.0 ACFM, Velocity: 116.6 FPS	Uses Facility Site Location
104211	Vertical	Waste Gas Combustor	OP in 2011	Height: 150.0 FEET, Shape: Circular, Diameter: 10.5 FEET, Temperature: 1,700.0 F, Flow Rate: 606,000.0 ACFM, Velocity: 116.6 FPS	Uses Facility Site Location
104212	Vertical	Waste Gas Combustor 31	OP in 2011	Height: 150.0 FEET, Shape: Circular, Diameter: 10.5 FEET, Temperature: 1,700.0 F, Flow Rate: 606,000.0 ACFM, Velocity: 116.6 FPS	Uses Facility Site Location
104213	Vertical	Waste Gas Combustor 32	OP in 2011	Height: 150.0 FEET, Shape: Circular, Diameter: 10.5 FEET, Temperature: 1,700.0 F, Flow Rate: 606,000.0 ACFM, Velocity: 116.6 FPS	Uses Facility Site Location
104214	Vertical	Waste Gas Combustor 41	OP in 2007	Height: 150.0 FEET, Shape: Circular, Diameter: 10.5 FEET, Temperature: 1,700.0 F, Flow Rate: 606,000.0 ACFM, Velocity: 116.6 FPS	Uses Facility Site Location

ID	Type	Description	Status	Details	Location
104215	Vertical	Emergency Generator 1 and 2	OP in 2007	Height: 4.0 FEET, Shape: Circular, Diameter: 0.25 FEET, Temperature: 1,075.0 F, Flow Rate: 353.0 ACFM, Velocity: 119.85 FPS	Uses Facility Site Location
104216	Vertical	Emergency Generator 3	OP in 2011	Height: 4.0 FEET, Shape: Circular, Diameter: 0.25 FEET, Temperature: 1,075.0 F, Flow Rate: 353.0 ACFM, Velocity: 119.85 FPS	Uses Facility Site Location
104217	Vertical	Emergency Generator 4	OP in 2007	Height: 4.0 FEET, Shape: Circular, Diameter: 0.25 FEET, Temperature: 1,075.0 F, Flow Rate: 557.0 ACFM, Velocity: 189.12 FPS	Uses Facility Site Location

CONTROL DEVICES				
ID	**Description**	**Status**	**Control Measure**	**Controlled Pollutants**
122506	Direct Flame Afterburner Primary 100 98	OP	21 - Direct Flame Afterburner	CO-Carbon Monoxide: 98.0%, SO2-Sulfur Oxides (SOx) expressed as SO2: 98.0%, VOC-Volatile Organic Compounds (VOCs): 98.0%, 75150-Carbon disulfide: 98.0%, 463581-Carbonyl sulfide: 98.0%, 57125-Cyanide: 98.0%, 7783064-Hydrogen sulfide: 98.0%
122507	Fabric Filter / Baghouse Primary 100 96	OP	127 - Fabric Filter / Baghouse	PM25-PRI-PM2.5 - Primary (Filterable + Condensible): 96.0%
122508	Fabric Filter / Baghouse Primary 100 98	OP	127 - Fabric Filter / Baghouse	PM10-PRI-PM10 - Primary (Filterable + Condensible): 98.0%, PM25-PRI-PM2.5 - Primary (Filterable + Condensible): 98.0%
122509	Fabric Filter / Baghouse Primary 100 99.9	OP	127 - Fabric Filter / Baghouse	PM10-PRI-PM10 - Primary (Filterable + Condensible): 99.9%
122510	Recuperative Thermal Oxidizer Primary 100 98	OP	317 - Recuperative Thermal Oxidizer	CO-Carbon Monoxide: 98.0%, SO2-Sulfur Oxides (SOx) expressed as SO2: 98.0%, VOC-Volatile Organic Compounds (VOCs): 98.0%, 75150-Carbon disulfide: 98.0%, 463581-Carbonyl sulfide: 98.0%, 7783064-Hydrogen sulfide: 98.0%

EMISSION UNITS				
ID	Type	Description	Status	Details
18480	100 - Boiler	Boiler NO 1	OP in 2002	Operation Start: , Design Capacity: 6.1 E6BTU/HR
18481	100 - Boiler	Boiler NO 2	OP in 2002	Operation Start: , Design Capacity: 6.28 E6BTU/HR
18482	999 - Unclassified	CLEAN-UP BAG FILTER NO 1	OP in 2002	Operation Start: , Design Capacity:
18483	999 - Unclassified	CLEAN-UP BAG FILTER NO 2	OP in 2002	Operation Start: , Design Capacity:
18484	999 - Unclassified	CLEAN-UP BAG FILTER NO 3	OP in 2002	Operation Start: , Design Capacity:
18485	999 - Unclassified	CLEAN-UP BAG FILTER NO 4	OP in 2002	Operation Start: , Design Capacity:
18486	770 - Transfer Point	Shipping Dept Clean-up Bagfiller 1	OP in 2002	Operation Start: , Design Capacity:
18487	270 - Incinerator	Thermal Oxidizer NO 1	OP in 2002	Operation Start: , Design Capacity: 147.0 E6BTU/HR
18488	270 - Incinerator	Thermal Oxidizer NO 2	OP in 2002	Operation Start: , Design Capacity: 87.0 E6BTU/HR
18489	270 - Incinerator	Thermal Oxidizer NO 3	OP in 2002	Operation Start: , Design Capacity:
18490	400 - Storage Tank	CB Storage Tanks	OP in 2002	Operation Start: , Design Capacity:
18491	400 - Storage Tank	Feed stock tank 65,000 Bbl	OP in 2002	Operation Start: , Design Capacity:
33837	770 - Transfer Point	Shipping Dept Clean-up Bagfiller 2	OP in 2005	Operation Start: , Design Capacity:
41787	790 - Other bulk material equipment	Sealed Bin Clean Up Bag Filter 1	OP in 2007	Operation Start: , Design Capacity:
47431	600 - Chemical Reactor	Production Unit 1	OP in 2007	Operation Start: , Design Capacity:
47467	600 - Chemical Reactor	Production Unit 2	OP in 2007	Operation Start: , Design Capacity:
47472	600 - Chemical Reactor	Production Unit 3	OP in 2007	Operation Start: , Design Capacity:
47474	600 - Chemical Reactor	Production Unit 4	OP in 2007	Operation Start: , Design Capacity:
105127	290 - Other combustion	Production Unit 1 - Transition Events	OP in 2007	Operation Start: , Design Capacity:
105128	290 - Other combustion	Production Unit 2 - Transition Events	OP in 2007	Operation Start: , Design Capacity:
105129	999 - Unclassified	Production Unit 3 - Transition Events	OP in 2007	Operation Start: , Design Capacity:
105130	999 - Unclassified	Production Unit 4 - Transition Events	OP in 2007	Operation Start: , Design Capacity:
105131	999 - Unclassified	EBF 4	OP in 2007	Operation Start: , Design Capacity:
105132	999 - Unclassified	Sealed Bin Clean-Up Bagfilter NO 2	OP in 2007	Operation Start: , Design Capacity:
105133	999 - Unclassified	Transloading Clean-Up Bagfilter	OP in 2007	Operation Start: , Design Capacity:
105138	999 - Unclassified	Dryer 11 Firebox	OP in 2007	Operation Start: , Design Capacity:
105139	999 - Unclassified	Dryer 12 Firebox	OP in 2007	Operation Start: , Design Capacity:
105140	999 - Unclassified	Dryer 21 Firebox	OP in 2007	Operation Start: , Design Capacity:
105141	999 - Unclassified	Dryer 31 Firebox	OP in 2007	Operation Start: , Design Capacity:
105142	999 - Unclassified	Dryer 32 Firebox	OP in 2007	Operation Start: , Design Capacity:
105143	999 - Unclassified	Dryer 41 Firebox	OP in 2007	Operation Start: , Design Capacity:
105144	999 - Unclassified	Reactor 11	OP in 2007	Operation Start: , Design Capacity:
105145	999 - Unclassified	Reactor 12	OP in 2007	Operation Start: , Design Capacity:

ID	Type	Description	Status	Details
105146	999 - Unclassified	Reactor 21	OP in 2007	Operation Start: , Design Capacity:
105147	999 - Unclassified	Reactor 31	OP in 2007	Operation Start: , Design Capacity:
105148	999 - Unclassified	Reactor 32	OP in 2007	Operation Start: , Design Capacity: 23.55 E6BTU/HR
105149	999 - Unclassified	Reactor 41	OP in 2007	Operation Start: , Design Capacity: 46.61 E6BTU/HR
105150	270 - Incinerator	Waste Gas Combuster 11	OP in 2007	Operation Start: , Design Capacity: 19.3 E6BTU/HR
105151	270 - Incinerator	Waste Gas Combustor 12	OP in 2007	Operation Start: , Design Capacity: 24.3 E6BTU/HR
105152	270 - Incinerator	Waste Gas Combustor 21	OP in 2007	Operation Start: , Design Capacity: 19.3 E6BTU/HR
105153	270 - Incinerator	Waste Gas Combustor 31	OP in 2007	Operation Start: , Design Capacity: 24.3 E6BTU/HR
105154	270 - Incinerator	Waste Gas Combustor 32	OP in 2007	Operation Start: , Design Capacity: 19.3 E6BTU/HR
105155	270 - Incinerator	Waste Gas Combustor 41	OP in 2007	Operation Start: , Design Capacity: 19.3 E6BTU/HR
105156	160 - Reciprocating IC Engine	Emergency Generator 1 and 2	OP in 2007	Operation Start: , Design Capacity: 63.0 HP
105157	160 - Reciprocating IC Engine	Emergency Generator 3	OP in 2007	Operation Start: , Design Capacity: 63.0 HP
105158	160 - Reciprocating IC Engine	Emergency Generator 4	OP in 2007	Operation Start: , Design Capacity: 110.0 HP

UNIT PROCESSES					
Emission Unit ID	**Unit Process ID**	**SCC**	**Description**	**Status**	**Details**
18480 Boiler NO 1	**42562**	10200603	Natural Gas - < 10 Million BTU/hr	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 18213 - Boiler NO 1 stack: 100.0%
18481 Boiler NO 2	**42563**	10200603	Natural Gas - < 10 Million BTU/hr	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 18214 - Boiler NO 2 Stack: 100.0%
18482 CLEAN-UP BAG FILTER NO 1	**42564**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: Yes Description: Fabric Filter / Baghouse Control Devices: 122507-Fabric Filter / Baghouse Primary 100 96, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 18215 - CLEAN UP BAG FILTER NO 1: 100.0%
18483 CLEAN-UP BAG FILTER NO 2	**42565**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: Yes Description: Fabric Filter / Baghouse Control Devices: 122508-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 18216 - CLEAN-UP BAG FILTER NO 2: 100.0%
18484 CLEAN-UP BAG FILTER NO 3	**42566**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: Yes Description: Fabric Filter / Baghouse Control Devices: 122508-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 18217 - CLEAN-UP BAG FILTER NO 3: 100.0%
18485 CLEAN-UP BAG FILTER NO 4	**42567**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: Yes Description: Fabric Filter / Baghouse Control Devices: 122508-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 18218 - CLEAN-UP BAG FILTER NO 4: 100.0%

Emission Unit ID	Unit Process ID	SCC	Description	Status	Details
18486 Shipping Dept Clean-up Bagfiller 1	**42568**	30100508	Carbon Black Production - Bagging/Loading	OP	**Control Approach** Controlled?: Yes Description: Fabric Filter / Baghouse Control Devices: 122508-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 18219 - Shipping Dept CUBF NO 1: 100.0%
18487 Thermal Oxidizer NO 1	**42569**	30100502	Carbon Black Production - Thermal Process	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 18220 - Thermal OxidizerNO 1 - TOx for Production Units 1 and 2: 100.0%
18488 Thermal Oxidizer NO 2	**42570**	30100502	Carbon Black Production - Thermal Process	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 18221 - TO NO 2 - The TOx for Production Unit NO 3: 100.0%
18489 Thermal Oxidizer NO 3	**42571**	30100502	Carbon Black Production - Thermal Process	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 18222 - TO NO 4 - Production Unit NO 3: 100.0%
18490 CB Storage Tanks	**42572**	30100599	Carbon Black Production - Other Not Classified	OP	**Control Approach** Controlled?: Yes Description: Fabric Filter / Baghouse Control Devices: 122508-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 18223 - CB Storage Tank: 100.0%
18491 Feed stock tank 65,000 Bbl	**42573**	40400301	Oil and Gas Field Storage and Working Tanks - Fixed Roof Tank: Breathing Loss	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 18224 - Feedstock Storage Tank vent: 100.0%
18491 Feed stock tank 65,000 Bbl	**42574**	40400302	Oil and Gas Field Storage and Working Tanks - Fixed Roof Tank: Working Loss	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 18224 - Feedstock Storage Tank vent: 100.0%

Emission Unit ID	Unit Process ID	SCC	Description	Status	Details
33837 Shipping Dept Clean-up Bagfiller 2	**140845**	30100508	Carbon Black Production - Bagging/Loading	OP	**Control Approach** Controlled?: Yes Description: Fabric Filter / Baghouse Control Devices: 122508-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 33538 - Shipping Dept. CUBF NO 2: 100.0%
41787 Sealed Bin Clean Up Bag Filter 1	**149632**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: Yes Description: Fabric Filter / Baghouse Control Devices: 122508-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 41618 - Sealed Bin Clean Up Bag Filter: 100.0%
47431 Production Unit 1	**156094**	30100502	Carbon Black Production - Thermal Process	OP	**Control Approach** Controlled?: Yes Description: Recuperative Thermal Oxidizer and other measures Control Devices: 122508-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122510-Recuperative Thermal Oxidizer Primary 100 98, Seq: 2, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 47207 - Thermal Oxidizer NO 1: 100.0%
47467 Production Unit 2	**156116**	30100502	Carbon Black Production - Thermal Process	OP	**Control Approach** Controlled?: Yes Description: Recuperative Thermal Oxidizer and other measures Control Devices: 122508-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122510-Recuperative Thermal Oxidizer Primary 100 98, Seq: 2, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 47234 - Thermal Oxidizer NO 1: 100.0%
47472 Production Unit 3	**156119**	30100502	Carbon Black Production - Thermal Process	OP	**Control Approach** Controlled?: Yes Description: Recuperative Thermal Oxidizer and other measures Control Devices: 122508-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122510-Recuperative Thermal Oxidizer Primary 100 98, Seq: 2, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 47238 - Thermal Oxidizer NO 2: 100.0%

Emission Unit ID	Unit Process ID	SCC	Description	Status	Details
47474 Production Unit 4	**156120**	30100502	Carbon Black Production - Thermal Process	OP	**Control Approach** Controlled?: Yes Description: Recuperative Thermal Oxidizer and other measures Control Devices: 122508-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% 122510-Recuperative Thermal Oxidizer Primary 100 98, Seq: 2, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 47239 - Thermal Oxidizer NO 3: 100.0%
105127 Production Unit 1 - Transition Events	**221128**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104185 - EPN 3: 100.0%
105128 Production Unit 2 - Transition Events	**221129**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104186 - EPN 7: 100.0%
105129 Production Unit 3 - Transition Events	**221130**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104187 - EPN 11: 100.0%
105130 Production Unit 4 - Transition Events	**221131**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104188 - EPN 20: 100.0%
105131 EBF 4	**221132**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104189 - EBF 4: 100.0%
105132 Sealed Bin Clean-Up Bagfilter NO 2	**221133**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: Yes Description: Fabric Filter / Baghouse Control Devices: 122508-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 104190 - Sealed Bin Clean-Up Bagfiller NO 2: 100.0%

Emission Unit ID	Unit Process ID	SCC	Description	Status	Details
105133 Transloading Clean-Up Bagfilter	**221134**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: Yes Description: Fabric Filter / Baghouse Control Devices: 122508-Fabric Filter / Baghouse Primary 100 98, Seq: 1, Capture Efficiency: 100.0%, Uptime/Effectiveness: 100.0% **Release Point Apportionment**: 104191 - Transloading Clean-Up Bagfilter: 100.0%
105138 Dryer 11 Firebox	**221139**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104197 - Dryer 11 Firebox stack: 100.0%
105139 Dryer 12 Firebox	**221140**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104198 - Dryer 12 Firebox: 100.0%
105140 Dryer 21 Firebox	**221141**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104199 - Dryer 21 Firebox: 100.0%
105141 Dryer 31 Firebox	**221142**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104200 - Dryer 31 Firebox: 100.0%
105142 Dryer 32 Firebox	**221144**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104201 - Dryer 32 Firebox: 100.0%
105143 Dryer 41 Firebox	**221145**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104202 - Dryer 41 Firebox: 100.0%
105144 Reactor 11	**221146**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104203 - Reactor 11: 100.0%

Emission Unit ID	Unit Process ID	SCC	Description	Status	Details
105145 Reactor 12	**221147**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104204 - Reactor 12: 100.0%
105146 Reactor 21	**221148**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104205 - Reactor 21: 100.0%
105147 Reactor 31	**221149**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104206 - Reactor 31: 100.0%
105148 Reactor 32	**221150**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104207 - Reactor 32: 100.0%
105149 Reactor 41	**221151**	30100504	Carbon Black Production - Oil Furnace Process: Main Process Vent	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104208 - Reactor 41: 100.0%
105150 Waste Gas Combuster 11	**221152**	30100502	Carbon Black Production - Thermal Process	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104209 - Waste Gas Combuster 11: 100.0%
105151 Waste Gas Combustor 12	**221153**	30100502	Carbon Black Production - Thermal Process	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104210 - Waste Gas Combustor 12: 100.0%
105152 Waste Gas Combustor 21	**221154**	30100502	Carbon Black Production - Thermal Process	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104211 - Waste Gas Combustor: 100.0%

Emission Unit ID	Unit Process ID	SCC	Description	Status	Details
105153 Waste Gas Combustor 31	**221155**	30100502	Carbon Black Production - Thermal Process	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104212 - Waste Gas Combustor 31: 100.0%
105154 Waste Gas Combustor 32	**221156**	30100502	Carbon Black Production - Thermal Process	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104213 - Waste Gas Combustor 32: 100.0%
105155 Waste Gas Combustor 41	**221157**	30100502	Carbon Black Production - Thermal Process	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104214 - Waste Gas Combustor 41: 100.0%
105156 Emergency Generator 1 and 2	**221158**	20200253	Natural Gas - 4-cycle Rich Burn	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104215 - Emergency Generator 1 and 2: 100.0%
105157 Emergency Generator 3	**221159**	20200253	Natural Gas - 4-cycle Rich Burn	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104216 - Emergency Generator 3: 100.0%
105158 Emergency Generator 4	**221160**	20200253	Natural Gas - 4-cycle Rich Burn	OP	**Control Approach** Controlled?: No Description: Control approach not specified. Assumes not controlled. **Release Point Apportionment**: 104217 - Emergency Generator 4: 100.0%

PROCESS EMISSIONS

Emission Unit ID	Unit Process ID	Throughput	Operations
18480 Boiler NO 1	**42562** Natural Gas - < 10 Million BTU/hr	**Annual Throughput:** 19.62 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 6.0, Weeks/Year: 50.0 Actual Hours/Year: 7,267.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.824
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.981
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.075
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.075
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.006
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.054

Emission Unit ID	Unit Process ID	Throughput	Operations
18481 Boiler NO 2	**42563** Natural Gas - < 10 Million BTU/hr	**Annual Throughput:** 26.359 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 52.0 Actual Hours/Year: 8,760.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.993
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	1.183
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.09
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.09
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.007
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.065

Emission Unit ID	Unit Process ID	Throughput	Operations
18482 CLEAN-UP BAG FILTER NO 1	**42564** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 38,583.556 TONS (Oil) (Output)	Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 49.0 Actual Hours/Year: 8,168.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.462
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.462

Emission Unit ID	Unit Process ID	Throughput	Operations
18483 CLEAN-UP BAG FILTER NO 2	**42565** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 33,620.067 TONS (Oil) (Output)	Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 49.0 Actual Hours/Year: 8,149.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.105
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.105

Emission Unit ID	Unit Process ID	Throughput	Operations
18484 CLEAN-UP BAG FILTER NO 3	**42566** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 31,818.686 TONS (Oil) (Input)	Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 47.0 Actual Hours/Year: 7,967.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.051
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.051

Emission Unit ID	Unit Process ID	Throughput	Operations
18485 CLEAN-UP BAG FILTER NO 4	**42567** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 55,422.682 TONS (Oil) (Input)	Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 49.0 Actual Hours/Year: 8,165.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.327
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.327

Emission Unit ID	Unit Process ID	Throughput	Operations
18486 Shipping Dept Clean-up Bagfiller 1	**42568** Carbon Black Production - Bagging/Loading	**Annual Throughput:** 51.912 TONS (Carbon Black) (Output)	Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 22.0 Actual Hours/Year: 3,675.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.052
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.052

Emission Unit ID	Unit Process ID	Throughput	Operations
18487 Thermal Oxidizer NO 1	**42569** Carbon Black Production - Thermal Process	**Annual Throughput:** 25.634 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	1.077
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	1.282
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.097
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.097
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.008

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.07

Emission Unit ID	Unit Process ID	Throughput	Operations
18488 Thermal Oxidizer NO 2	**42570** Carbon Black Production - Thermal Process	**Annual Throughput:** 14.897 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.626
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.745
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.057
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.057
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.004
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.041

Emission Unit ID	Unit Process ID	Throughput	Operations
18489 Thermal Oxidizer NO 3	**42571** Carbon Black Production - Thermal Process	**Annual Throughput:** 0.033 1000 STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.001
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.002
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0

Emission Unit ID	Unit Process ID	Throughput	Operations
18490 CB Storage Tanks	**42572** Carbon Black Production - Other Not Classified	**Annual Throughput:** 95,772.33383 TONS (Carbon Black) (Output)	Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 52.0 Actual Hours/Year: 8,760.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.418
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.418

Emission Unit ID	Unit Process ID	Throughput	Operations

Emission Unit ID	Unit Process ID	Throughput	Operations
18491 Feed stock tank 65,000 Bbl	**42573** Oil and Gas Field Storage and Working Tanks - Fixed Roof Tank: Breathing Loss	**Annual Throughput:** 79,998.0 1000 GALLONS (Liquid) (Existing)	Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 52.0 Actual Hours/Year: 8,760.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.381

Emission Unit ID	Unit Process ID	Throughput	Operations
18491 Feed stock tank 65,000 Bbl	**42574** Oil and Gas Field Storage and Working Tanks - Fixed Roof Tank: Working Loss	**Annual Throughput:** 79,998.0 1000 GALLONS (Liquid) (Input)	Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 52.0 Actual Hours/Year: 8,760.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	1.198

Emission Unit ID	Unit Process ID	Throughput	Operations
33837 Shipping Dept Clean-up Bagfiller 2	**140845** Carbon Black Production - Bagging/Loading	**Annual Throughput:** 38.934 TONS (Carbon Black) (Output)	Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 16.0 Actual Hours/Year: 2,750.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM10-PRI - PM10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.039
PM25-PRI - PM2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.039

Emission Unit ID	Unit Process ID	Throughput	Operations
41787 Sealed Bin Clean Up Bag Filter 1	**149632** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 25.956 TONS (Carbon Black) (Output)	Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 26.0 Actual Hours/Year: 4,436.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM10-PRI - PM10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.026
PM25-PRI - PM2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.026

Emission Unit ID	Unit Process ID	Throughput	Operations
47431 Production Unit 1	**156094** Carbon Black Production - Thermal Process	**Annual Throughput:** 8,603,759.0 GALLONS (Oil) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.162
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	223.567
PM10-PRI - PM10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	33.937

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM25-PRI - PM2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	33.937
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	624.642
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.791
75150 - Carbon disulfide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
463581 - Carbonyl sulfide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
57125 - Cyanide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
7783064 - Hydrogen sulfide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0

Emission Unit ID	Unit Process ID	Throughput	Operations
47467 Production Unit 2	**156116** Carbon Black Production - Thermal Process	**Annual Throughput:** 5,741,023.39 GALLONS (Oil) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.1411
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	194.807
PM10-PRI - PM10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	29.5716
PM25-PRI - PM2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	29.5716
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	444.5091
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.6893
75150 - Carbon disulfide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
463581 - Carbonyl sulfide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
57125 - Cyanide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
7783064 - Hydrogen sulfide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0

Emission Unit ID	Unit Process ID	Throughput	Operations
47472 Production Unit 3	**156119** Carbon Black Production - Thermal Process	**Annual Throughput:** 5,556,973.97 GALLONS (Oil) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0984
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	211.4843
PM10-PRI - PM10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	36.6655

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM25-PRI - PM2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	36.6655
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	480.8748
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0648
75150 - Carbon disulfide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
463581 - Carbonyl sulfide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
57125 - Cyanide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
7783064 - Hydrogen sulfide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0

Emission Unit ID	Unit Process ID	Throughput	Operations
47474 Production Unit 4	**156120** Carbon Black Production - Thermal Process	**Annual Throughput:** 9,445,413.12 GALLONS (Oil) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0214
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	305.8553
PM10-PRI - PM10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	68.0399
PM25-PRI - PM2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	68.0399
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	697.6867
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	4.7186
75150 - Carbon disulfide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
463581 - Carbonyl sulfide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
57125 - Cyanide			3_0 - Mass Balance Formula (no EF)	0.0
7783064 - Hydrogen sulfide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0

Emission Unit ID	Unit Process ID	Throughput	Operations
105127 Production Unit 1 - Transition Events	**221128** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 18,894.0 POUNDS (Oil) (Input)	Average Hours/Day: 0.2, Days/Week: 1.0, Weeks/Year: 10.0 Actual Hours/Year: 2.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			10_0 - OK DEQ Approved Method (no EF)	0.0
NOX - Nitrogen Oxides (NOx) expressed as NO2			10_0 - OK DEQ Approved Method (no EF)	0.0
PM10-PRI - PM10 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	0.0
PM25-PRI - PM2.5 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	0.0
SO2 - Sulfur Oxides (SOx) expressed as SO2			10_0 - OK DEQ Approved Method (no EF)	0.0
VOC - Volatile Organic Compounds (VOCs)			10_0 - OK DEQ Approved Method (no EF)	0.0

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
75150 - Carbon disulfide			10_0 - OK DEQ Approved Method (no EF)	0.0
463581 - Carbonyl sulfide			10_0 - OK DEQ Approved Method (no EF)	0.0
57125 - Cyanide			10_0 - OK DEQ Approved Method (no EF)	0.0
7783064 - Hydrogen sulfide			10_0 - OK DEQ Approved Method (no EF)	0.0

Emission Unit ID	Unit Process ID	Throughput	Operations
105128 Production Unit 2 - Transition Events	**221129** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 16,504.0 POUNDS (Oil) (Input)	Average Hours/Day: 0.2, Days/Week: 1.0, Weeks/Year: 10.0 Actual Hours/Year: 2.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			10_0 - OK DEQ Approved Method (no EF)	0.0
NOX - Nitrogen Oxides (NOx) expressed as NO2			10_0 - OK DEQ Approved Method (no EF)	0.0
PM10-PRI - PM10 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	0.0
PM25-PRI - PM2.5 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	0.0
SO2 - Sulfur Oxides (SOx) expressed as SO2			10_0 - OK DEQ Approved Method (no EF)	0.0
VOC - Volatile Organic Compounds (VOCs)			10_0 - OK DEQ Approved Method (no EF)	0.0
75150 - Carbon disulfide			10_0 - OK DEQ Approved Method (no EF)	0.0
463581 - Carbonyl sulfide			10_0 - OK DEQ Approved Method (no EF)	0.0
57125 - Cyanide			10_0 - OK DEQ Approved Method (no EF)	0.0
7783064 - Hydrogen sulfide			10_0 - OK DEQ Approved Method (no EF)	0.0

Emission Unit ID	Unit Process ID	Throughput	Operations
105129 Production Unit 3 - Transition Events	**221130** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 15,975.0 POUNDS (Carbon Black) (Input)	Average Hours/Day: 0.2, Days/Week: 1.0, Weeks/Year: 10.0 Actual Hours/Year: 2.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			10_0 - OK DEQ Approved Method (no EF)	0.0
NOX - Nitrogen Oxides (NOx) expressed as NO2			10_0 - OK DEQ Approved Method (no EF)	0.0
PM10-PRI - PM10 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	0.0
PM25-PRI - PM2.5 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	0.0
SO2 - Sulfur Oxides (SOx) expressed as SO2			10_0 - OK DEQ Approved Method (no EF)	0.0
VOC - Volatile Organic Compounds (VOCs)			10_0 - OK DEQ Approved Method (no EF)	0.0
75150 - Carbon disulfide			10_0 - OK DEQ Approved Method (no EF)	0.0
463581 - Carbonyl sulfide			10_0 - OK DEQ Approved Method (no EF)	0.0
57125 - Cyanide			10_0 - OK DEQ Approved Method (no EF)	0.0
7783064 - Hydrogen sulfide			10_0 - OK DEQ Approved Method (no EF)	0.0

Emission Unit ID	Unit Process ID	Throughput	Operations
105130 Production Unit 4 - Transition Events	**221131** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 13,576.0 POUNDS (Carbon Black) (Input)	Average Hours/Day: 0.2, Days/Week: 1.0, Weeks/Year: 10.0 Actual Hours/Year: 2.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			10_0 - OK DEQ Approved Method (no EF)	0.0
NOX - Nitrogen Oxides (NOx) expressed as NO2			10_0 - OK DEQ Approved Method (no EF)	0.0
PM10-PRI - PM10 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	0.0

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			10_0 - OK DEQ Approved Method (no EF)	0.0
SO2 - Sulfur Oxides (SOx) expressed as SO2			10_0 - OK DEQ Approved Method (no EF)	0.0
VOC - Volatile Organic Compounds (VOCs)			10_0 - OK DEQ Approved Method (no EF)	0.0
75150 - Carbon disulfide			10_0 - OK DEQ Approved Method (no EF)	0.0
463581 - Carbonyl sulfide			10_0 - OK DEQ Approved Method (no EF)	0.0
57125 - Cyanide			10_0 - OK DEQ Approved Method (no EF)	0.0
7783064 - Hydrogen sulfide			10_0 - OK DEQ Approved Method (no EF)	0.0

Emission Unit ID	Unit Process ID	Throughput	Operations
105131 EBF 4	**221132** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 55,422.68 TONS (Oil) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			3_0 - Mass Balance Formula (no EF)	48.936
NOX - Nitrogen Oxides (NOx) expressed as NO2			3_0 - Mass Balance Formula (no EF)	32.484
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	1.739
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	1.739
VOC - Volatile Organic Compounds (VOCs)			3_0 - Mass Balance Formula (no EF)	3.021

Emission Unit ID	Unit Process ID	Throughput	Operations
105132 Sealed Bin Clean-Up Bagfilter NO 2	**221133** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 6.489 TONS (Carbon Black) (Input)	Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 7.0 Actual Hours/Year: 1,236.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.006
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.006

Emission Unit ID	Unit Process ID	Throughput	Operations
105133 Transloading Clean-Up Bagfilter	**221134** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 6.489 TONS (Carbon Black) (Output)	Average Hours/Day: 24.0, Days/Week: 7.0, Weeks/Year: 8.0 Actual Hours/Year: 1,350.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.006
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.006

Emission Unit ID	Unit Process ID	Throughput	Operations
105138 Dryer 11 Firebox	**221139** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 0.448 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			3_0 - Mass Balance Formula (no EF)	0.002
NOX - Nitrogen Oxides (NOx) expressed as NO2			3_0 - Mass Balance Formula (no EF)	2.236

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	0.339
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	0.339
VOC - Volatile Organic Compounds (VOCs)			3_0 - Mass Balance Formula (no EF)	0.008

Emission Unit ID	Unit Process ID	Throughput	Operations
105139 Dryer 12 Firebox	**221140** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 0.7861 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			3_0 - Mass Balance Formula (no EF)	0.002
NOX - Nitrogen Oxides (NOx) expressed as NO2			3_0 - Mass Balance Formula (no EF)	2.236
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	0.339
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	0.339
VOC - Volatile Organic Compounds (VOCs)			3_0 - Mass Balance Formula (no EF)	0.008

Emission Unit ID	Unit Process ID	Throughput	Operations
105140 Dryer 21 Firebox	**221141** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 0.2032 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			3_0 - Mass Balance Formula (no EF)	0.003
NOX - Nitrogen Oxides (NOx) expressed as NO2			3_0 - Mass Balance Formula (no EF)	3.896
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	0.591
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	0.591
VOC - Volatile Organic Compounds (VOCs)			3_0 - Mass Balance Formula (no EF)	0.014

Emission Unit ID	Unit Process ID	Throughput	Operations
105141 Dryer 31 Firebox	**221142** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 0.3802 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			3_0 - Mass Balance Formula (no EF)	0.001
NOX - Nitrogen Oxides (NOx) expressed as NO2			3_0 - Mass Balance Formula (no EF)	2.115
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	0.367
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	0.367
VOC - Volatile Organic Compounds (VOCs)			3_0 - Mass Balance Formula (no EF)	0.001

Emission Unit ID	Unit Process ID	Throughput	Operations
105142 Dryer 32 Firebox	**221144** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 0.345 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			3_0 - Mass Balance Formula (no EF)	0.001
NOX - Nitrogen Oxides (NOx) expressed as NO2			3_0 - Mass Balance Formula (no EF)	2.115

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	0.367
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	0.367
VOC - Volatile Organic Compounds (VOCs)			3_0 - Mass Balance Formula (no EF)	0.001

Emission Unit ID	Unit Process ID	Throughput	Operations
105143 Dryer 41 Firebox	**221145** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 0.6194 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			3_0 - Mass Balance Formula (no EF)	0.0
NOX - Nitrogen Oxides (NOx) expressed as NO2			3_0 - Mass Balance Formula (no EF)	6.117
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	1.361
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			3_0 - Mass Balance Formula (no EF)	1.361
VOC - Volatile Organic Compounds (VOCs)			3_0 - Mass Balance Formula (no EF)	0.094

Emission Unit ID	Unit Process ID	Throughput	Operations
105144 Reactor 11	**221146** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 171.429 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	7.2
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	8.571
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.651
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.651
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.051
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.471

Emission Unit ID	Unit Process ID	Throughput	Operations
105145 Reactor 12	**221147** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 169.457 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	7.117
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	8.473
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.644
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.644
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.051

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.466

Emission Unit ID	Unit Process ID	Throughput	Operations
105146 Reactor 21	**221148** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 104.152 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	4.374
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	5.208
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.396
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.396
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.031
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.286

Emission Unit ID	Unit Process ID	Throughput	Operations
105147 Reactor 31	**221149** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 104.152 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	4.374
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	5.208
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.396
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.396
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.031
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.286

Emission Unit ID	Unit Process ID	Throughput	Operations
105148 Reactor 32	**221150** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 186.826 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	7.847
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	9.341
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.71

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.71
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.056
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.056

Emission Unit ID	Unit Process ID	Throughput	Operations
105149 Reactor 41	**221151** Carbon Black Production - Oil Furnace Process: Main Process Vent	**Annual Throughput:** 187.55 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	7.877
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	9.377
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.713
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.713
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.506
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.516

Emission Unit ID	Unit Process ID	Throughput	Operations
105150 Waste Gas Combuster 11	**221152** Carbon Black Production - Thermal Process	**Annual Throughput:** 0.448 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.019
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.022
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.002
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.002
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.001

Emission Unit ID	Unit Process ID	Throughput	Operations
105151 Waste Gas Combustor 12	**221153** Carbon Black Production - Thermal Process	**Annual Throughput:** 0.786 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.033

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.039
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.003
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.003
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.002

Emission Unit ID	Unit Process ID	Throughput	Operations
105152 Waste Gas Combustor 21	**221154** Carbon Black Production - Thermal Process	**Annual Throughput:** 0.203 1000 STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.009
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.01
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.001
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.001
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.001

Emission Unit ID	Unit Process ID	Throughput	Operations
105153 Waste Gas Combustor 31	**221155** Carbon Black Production - Thermal Process	**Annual Throughput:** 0.38 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.016
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.019
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.001
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.001
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.001

Emission Unit ID	Unit Process ID	Throughput	Operations
105154 Waste Gas Combustor 32	**221156** Carbon Black Production - Thermal Process	**Annual Throughput:** 0.345 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.014
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.017
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.001
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.001
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.001

Emission Unit ID	Unit Process ID	Throughput	Operations
105155 Waste Gas Combustor 41	**221157** Carbon Black Production - Thermal Process	**Annual Throughput:** 0.619 MILLION STANDARD CUBIC FEET (Natural Gas) (Input)	Average Hours/Day: 24.0, Days/Week: 5.0, Weeks/Year: 52.0 Actual Hours/Year: 6,240.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.026
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.031
PM10-PRI - PM 10 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.002
PM25-PRI - PM 2.5 - Primary (Filterable + Condensible)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.002
SO2 - Sulfur Oxides (SOx) expressed as SO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.0
VOC - Volatile Organic Compounds (VOCs)			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.002

Emission Unit ID	Unit Process ID	Throughput	Operations
105156 Emergency Generator 1 and 2	**221158** Natural Gas - 4-cycle Rich Burn	**Annual Throughput:** 1,575.0 HORSEPOWER-HOURS (Natural Gas) (Input)	Average Hours/Day: 1.0, Days/Week: 1.0, Weeks/Year: 25.0 Actual Hours/Year: 25.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.002
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.001

Emission Unit ID	Unit Process ID	Throughput	Operations
105157 Emergency Generator 3	**221159** Natural Gas - 4-cycle Rich Burn	**Annual Throughput:** 3,017.7 HORSEPOWER-HOURS (Natural Gas) (Input)	Average Hours/Day: 1.0, Days/Week: 1.0, Weeks/Year: 48.0 Actual Hours/Year: 48.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.004
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.003

Emission Unit ID	Unit Process ID	Throughput	Operations
105158 Emergency Generator 4	**221160** Natural Gas - 4-cycle Rich Burn	**Annual Throughput:** 3,065.7 HORSEPOWER-HOURS (Natural Gas) (Input)	Average Hours/Day: 1.0, Days/Week: 1.0, Weeks/Year: 28.0 Actual Hours/Year: 28.0 Seasonal Operations: Dec-Feb: 25.0%, Mar-May: 25.0%, Jun-Aug: 25.0%, Sep-Nov: 25.0%

Pollutant	Emis. Factor (Lbs/UOM)	Emis. Factor UOM	Calculation Method	Estimated Emis. (Tons)
CO - Carbon Monoxide			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.004
NOX - Nitrogen Oxides (NOx) expressed as NO2			8_0 - US EPA Documents incl. AP-42 & WebFIRE (no EF)	0.003